

**CLAIMS**

1           1. A method of building a database in an exchange system to enable the lo-  
2 cation of distributed health care information, the method comprising the steps of:

3               receiving metadata including organization information, patient demo-  
4 graphic data, and information locator data;

5               determining a universal person object corresponding to the demo-  
6 graphic data;

7               updating the universal person object in accordance with the metadata;  
8 and

9               storing the information locator data so that the information locator data  
10 is associated with the universal person object.

1           2. The method of claim 1 wherein the determining step further comprises the  
2 steps of:

3               searching the database for an existing universal person object corre-  
4 sponding to the patient demographic data and determining that there is no  
5 existing universal person object corresponding to the patient demographic  
6 data; and

7               creating the universal person object corresponding to the patient demo-  
8 graphic data.

1           3. The method of claim 1 wherein the determining step further comprises the  
2 step of searching the database and locating the universal person object correspond-  
3 ing to the patient demographic data.

1           4. The method of claim 1 further comprising the step of, after the updating  
2 step, forwarding the universal person object to a parent server.

1           5. The method of claim 2 further comprising the step of, after the updating  
2 step, forwarding the universal person object to a parent server.

1           6. The method of claim 3 further comprising the step of, after the updating  
2 step, forwarding the universal person object to a parent server.

1           7. A method of locating particular information pertaining to a person wherein  
2 the particular information is stored among distributed information, the method com-  
3 prising the steps of:

4                 receiving a query from a provider;

5 correlating the query against at least a primary database in at least a  
6 primary domain to locate a universal person object corresponding to the per-  
7 son;  
8 retrieving locator data associated with the universal person object;  
9 filtering the locator data according to one or more policies; and  
10 presenting the locator data to the provider.

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1 8. The method of claim 7 further comprising the steps of:  
2 determining if a pointer exists in the primary database, the pointer indi-  
3 cating a remote database in a remote domain; and  
4 if the pointer exists, correlating the query against the remote database  
5 in the remote domain.

1 9. The method of claim 7 further comprising the steps of:  
2 presenting correlation results to the provider; and  
3 receiving constraints and parameters from the provider, the constraints  
4 and parameters for directing the retrieving of the locator data.

1 10. The method of claim 8 further comprising the steps of:  
2 presenting correlation results to the provider; and

3 receiving constraints and parameters from the provider, the constraints  
4 and parameters for directing the retrieving of the locator data.

1 11. In a network including distributed information, a method of viewing a rec-  
2 ord for a particular person from within the information, the method comprising the  
3 steps of:

4 sending a query from a provider application to a primary domain server;  
5 correlating the query by accessing at least a primary database in at  
6 least a primary domain to locate a universal person object corresponding to  
7 the particular person;  
8 retrieving locator data associated with the universal person object;  
9 filtering the locator data according to one or more policies;  
10 presenting the locator data to the provider application;  
11 selecting, at the provider application, one or more records from a re-  
12 mote data system; and  
13 accessing the one or more records from the remote data system by the  
14 provider application.

1 12. The method of claim 11 further comprising the steps of:

2 determining if a pointer exists in the primary database, the pointer indi-  
3 cating a remote database in a remote domain; and

4 if the pointer exists, correlating the query by accessing the remote da-  
5 tabase in the remote domain.

1 13. The method of claim 11 further comprising the steps of:  
2 presenting correlation results to the provider application; and  
3 setting constraints and parameters at the provider application, the con-  
4 straints and parameters for directing the retrieving of the locator data.

1 14. The method of claim 12 further comprising the steps of:  
2 presenting correlation results to the provider application; and  
3 setting constraints and parameters at the provider application, the con-  
4 straints and parameters for directing the retrieving of the locator data.

1 15. A computer program product for enabling a server to build a database in  
2 an exchange system to enable the location of distributed information, the computer  
3 program product including a computer program comprising:  
4 instructions for creating universal person objects;  
5 instructions for receiving metadata including organization information,  
6 demographic data, and information locator data;  
7 instructions for searching the database for universal person objects;

8 instructions for updating a universal person object corresponding to the  
9 demographic data in accordance with the metadata; and  
10 instructions for storing the information locator data so that the informa-  
11 tion locator data is associated with the universal person object corresponding  
12 to the demographic data.

1 16. The computer program product of claim 15 wherein the computer program  
2 further comprises instructions for forwarding the universal person objects to a parent  
3 server.

1 17. A computer program product for enabling the locating particular informa-  
2 tion pertaining to a person wherein the particular information is stored among distrib-  
3 uted information, the computer program product including a computer program  
4 comprising:

5 instructions for receiving a query from a provider;

6 instructions for correlating the query against at least a primary database  
7 at least a primary domain to locate a universal person object corresponding to  
8 the person;

9 instructions for retrieving locator data associated with the universal per-  
10 son object;

11 instructions for filtering the locator data according to one or more poli-  
12 cies; and  
13 instructions for presenting the locator data to the provider.

1 18. The computer program product of claim 17 wherein the computer program  
2 further comprises:

3 instructions for determining if a pointer exists in the primary database,  
4 the pointer indicating a remote database in a remote domain; and  
5 instructions for correlating the query against the remote database in the  
6 remote domain.

1 19. The computer program product of claim 17 wherein the computer program  
2 further comprises:

3 instructions for presenting correlation results to the provider; and  
4 instructions for receiving constraints and parameters from the provider,  
5 the constraints and parameters for directing the retrieving of the locator data.

1 20. The computer program product of claim 18 wherein the computer program  
2 further comprises:

3 instructions for presenting correlation results to the provider; and

4 instructions for receiving constraints and parameters from the provider,  
5 the constraints and parameters for directing the retrieving of the locator data.

1 21. Apparatus for building a database to enable the location of distributed in-  
2 formation, the apparatus comprising:

3 means for creating universal person objects;

4 means for receiving metadata including organization information,  
5 demographic data, and information locator data;

6 means for searching the database for universal person objects;

7 means for updating a universal person object corresponding to the  
8 demographic data in accordance with the metadata; and

9 means for storing the information locator data so that the information  
10 locator data is associated with the universal person object corresponding to  
11 the demographic data.

1 22. Apparatus for locating particular information pertaining to a person  
2 wherein the particular information is stored among distributed information, the appa-  
3 ratus comprising:

4 means for receiving a query from a provider;



means for correlating the query against at least a primary database at least a primary domain to locate a universal person object corresponding to the person;

means for retrieving locator data associated with the universal person object;

means for filtering the locator data according to one or more policies; and

means for presenting the locator data to the provider.

23. A network including distributed health care information comprising:

a provider application operable to issue queries; and

at least a first server connected to the provider application, and containing a primary correlation system connected to a primary database of universal person objects, the server operable to receive the queries, correlate the queries against the database, and retrieve locator data, the locator data indicating the location of one or more specific records from within the distributed provider information.

24. The network of claim 23 further comprising a second server connected to the first server, and including a remote correlation system connected to a remote database of universal person objects.

1           25. The network of claim 23 further comprising a remote data system con-  
2     taining at least a portion of the distributed health care information, the remote data  
3     system operable to connect to the provider application, format, and supply one or  
4     more of the specific records over the network.

1           26. The network of claim 24 further comprising a remote data system con-  
2     taining at least a portion of the distributed health care information, the remote data  
3     system operable to connect to the provider application, format, and supply one or  
4     more of the specific records over the network.

1           27. A programmed computer system operable to build a database in an ex-  
2     change system to enable the location of distributed health care information by per-  
3     forming the steps of:

4                 receiving metadata including organization information, demographic  
5     data, and information locator data;

6                 determining a universal person object corresponding to the demo-  
7     graphic data;

8                 updating the universal person object in accordance with the metadata;

9     and

10 storing the information locator data so that the information locator data  
11 is associated with the universal person object.

1 28. The system of claim 27 wherein the determining step further comprises  
2 the steps of:

3 searching the database for an existing universal person object corre-  
4 sponding to the demographic data and determining that there is no existing  
5 universal person object corresponding to the demographic data; and  
6 creating the universal person object corresponding to the demographic  
7 data.

1 29. The system of claim 27 wherein the determining step further comprises  
2 the step of searching the database and locating the universal person object corre-  
3 sponding to the demographic data.

1 30. The system of claim 27 further enabled to perform the step of forwarding  
2 the universal person object to a parent server.

1           31. The system of claim 28 further enabled to perform the step of forwarding  
2 the universal person object to a parent server.

1           32. The system of claim 29 further enabled to perform the step of forwarding  
2 the universal person object to a parent server.

1           33. A programmed computer system which is operable to locate particular  
2 health care information pertaining to a person wherein the particular health care in-  
3 formation is stored among distributed provider's by performing the steps of:  
4           receiving a query from a provider;  
5           correlating the query against at least a primary database at least a pri-  
6 mary domain to locate a universal person object corresponding to the person;  
7           retrieving locator data associated with the universal person object;  
8           filtering the locator data according to one or more policies; and  
9           presenting the locator data to the provider.

1           34. The system of claim 33 further enabled to perform the steps of:  
2           determining if a pointer exists in the primary database, the pointer indi-  
3 cating a remote database in a remote domain; and

4 if the pointer exists, correlating the query against the remote database  
5 in the remote domain.

1 35. The system of claim 33 further enabled to perform the steps of:  
2 presenting correlation results to the provider; and  
3 receiving constraints and parameters from the provider, the constraints  
4 and parameters for directing the retrieving of the locator data.

1 36. The system of claim 34 further enabled to perform the steps of:  
2 presenting correlation results to the provider; and  
3 receiving constraints and parameters from the provider, the constraints  
4 and parameters for directing the retrieving of the locator data.

1 37. Apparatus for enabling the location of records from among distributed in-  
2 formation, the apparatus comprising:  
3 an information locator service for storing and accessing information lo-  
4 cator data;  
5 a database of universal person objects, each universal person object  
6 corresponding to a person and associated with information locator data in the  
7 information locator service; and

8 a correlation system connected to the database for correlating demo-  
9 graphic information against the database to locate a particular universal per-  
10 son object.

1 38. The apparatus of claim 37 further comprising a person identification serv-  
2 ice connected to the correlation system for providing a standard interface for receiv-  
3 ing the demographic information.

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1 39. The apparatus of claim 37 further comprising a resource access descrip-  
2 tion service for maintaining and applying policy information to information locator  
3 data.

1 40. The apparatus of claim 38 further comprising a resource access descrip-  
2 tion service for maintaining and applying policy information to information locator  
3 data.

1 41. A memory system encoded with a data structure for defining a universal  
2 person object for use in correlating queries for records, the data structure comprising:

- 3           a person class including references to person specific data, the person  
4           class further being operable to track historical instances of the person specific  
5           data;
- 6           a person identifier class associated the person class, the person identi-  
7           fier class including references to one or more person identifiers; and
- 8           a domain identifier class associated with the person class for identifying  
9           one or more systems from which the one or more person identifiers have been  
10          received.

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